

East Building, PHH-30 1200 New Jersey Avenue S.E. Washington, D.C. 20590

Pipeline and Hazardous Materials Safety Administration

DOT-SP 20893

EXPIRATION DATE: 2021-06-30

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. GRANTEE: Daimler AG

Germersheim, Germany

US AGENT: Currie Associates, Inc.

Queensbury, NY

2. PURPOSE AND LIMITATION:

- a. This special permit authorizes the transportation in commerce of "Vehicle, flammable liquid powered," with a low production lithium ion battery installed that has not passed the UN-required tests. This special permit provides no relief from the Hazardous Materials Regulations (HMR) or the International Civil Aviation Organization's Technical Instructions for the Safe Transport of Dangerous Goods by Air (ICAO TI) other than as specifically stated herein. The most recent revision supersedes all previous revisions.
- b. The safety analyses performed in the development of this special permit only considered the hazards and risks associated with the transportation in commerce.
- c. No party status will be granted to this special permit.
- d. This special permit serves as an approval under Packing Instruction 950 of the ICAO TI and as a "Competent Authority Approval" as defined under 49 CFR § 107.1.
- 3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.

Tracking Number: 2019055102

July 05, 2019

- 4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR § 172.301(c) in that marking the vehicle with the special permit number is not required; and § 173.220(d) in that the lithium battery contained in the vehicle is not of a type tested in accordance with the UN Manual of Tests and Criteria.
- 5. BASIS: This special permit is based on the application of DAIMLER AG dated May 15, 2019 submitted in accordance with \$ 107.105 and the public proceeding thereon.

6. HAZARDOUS MATERIALS (49 CFR 172.101):

Hazardous Materials Description			
Proper Shipping Name	Hazard Class/ Division	Identi- fication Number	Packing Group
Vehicle, flammable liquid powered or Vehicle, fuel cell, flammable liquid powered	9	UN3166	N/A

7. SAFETY CONTROL MEASURES:

- a. <u>Safety Controls</u>: Only low production lithium ion battery may be offered for transportation under the terms of this special permit. ("Low production" is defined as a production run of not more than 100 batteries annually of a particular type.) Each different battery type must comply with all the conditions of this special permit prior to being offered for transportation. The authorized low production HV lithium ion battery must be comprised of:
 - (1) Two modules consisting of 54 cells identified as PB400 each rated at 265 Wh connected in series.
 - (2) Each module has a maximum energy capacity of 15 kWh
 - (3) The low production battery must be equipped with an effective means prevent dangerous reverse current flow when connected in parallel.

b. Testing Requirements:

- (1) All lithium ion cells must be of a type that have passed all required tests as specified in the "UN Manual of Tests and Criteria, $6^{\rm th}$ Revised Edition."
- (2) The battery needs not be of a type that has passed all required tests specified in the "UN Manual of Tests and Criteria, 6th Revised Edition" except for the vibration test, shock test, and short-circuit test described in the supplemental submission dated July 2, 2019 and on file with the Office of Hazardous Materials Safety Approvals and Permits Division.
- (3) The battery must be equipped with a battery management system to prevent short circuiting, overdischarge between modules in the battery, and overcharging of the battery.

c. Packaging Requirements:

- (1) The battery must be placed in a robust, impactresistant outer casing and securely installed in the vehicle
- (2) The low production lithium ion battery contained in a vehicle must be securely fastened in the battery holder of the vehicle and be protected in such a manner as to prevent damage and short circuits.
- (3) The vehicle must be secured with tie-downs to prevent inadvertent movement during transport.
- (4) The low production lithium ion battery installed in a vehicle must be packaged in accordance with § 173.220 or the International Civil Aviation Organization's Technical Instructions for the Safe Transport of Dangerous Goods by Air (ICAO TI), Packing Instruction 950.
- (5) The net weight of the battery may not exceed 252 kg for cargo air transportation.
- d. <u>Marking Requirements</u>: Marking vehicles with the special permit number is not required.

8. SPECIAL PROVISIONS:

- a. A person who is not a holder of this special permit who receives a package covered by this special permit may reoffer it for transportation provided no modification or change is made to the package or its contents and it is reoffered for transportation in conformance with this special permit and the HMR.
- b. A current copy of this special permit must be maintained at each facility where the package is offered or reoffered for transportation.
- 9. MODES OF TRANSPORTATION AUTHORIZED: Cargo-only aircraft.
- 10. MODAL REQUIREMENTS: A current copy of this special permit must be carried aboard each aircraft used to transport packages covered by this special permit. The shipper must furnish a copy of this special permit to the air carrier before or at the time the shipment is tendered.
- 11. <u>COMPLIANCE</u>: Failure by a person to comply with any of the following may result in suspension or revocation of this special permit and penalties prescribed by the Federal hazardous materials transportation law, 49 U.S.C. 5101 <u>et seq:</u>
 - o All terms and conditions prescribed in this special permit and the Hazardous Materials Regulations, 49 CFR Parts 171-180.
 - o Persons operating under the terms of this special permit must comply with the security plan requirement in Subpart I of Part 172 of the HMR, when applicable.
 - o Registration required by $$107.601 \text{ } \underline{\text{et seq.}}$, when applicable.

Each "Hazmat employee", as defined in § 171.8, who performs a function subject to this special permit must receive training on the requirements and conditions of this special permit in addition to the training required by §§ 172.700 through 172.704.

No person may use or apply this special permit, including display of its number, when this special permit has expired or is otherwise no longer in effect.

July 05, 2019

Under Title VII of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU)—"The Hazardous Materials Safety and Security Reauthorization Act of 2005" (Pub. L. 109-59), 119 Stat. 1144 (August 10, 2005), amended the Federal hazardous materials transportation law by changing the term "exemption" to "special permit" and authorizes a special permit to be granted up to two years for new special permits and up to four years for renewals.

12. REPORTING REQUIREMENTS: Shipments or operations conducted under this special permit are subject to the Hazardous Materials Incident Reporting requirements specified in 49 CFR §§ 171.15 - Immediate notice of certain hazardous materials incidents, and 171.16 - Detailed hazardous materials incident reports. In addition, the grantee(s) of this special permit must notify the Associate Administrator for Hazardous Materials Safety, in writing, of any incident involving a package, shipment or operation conducted under terms of this special permit.

Issued in Washington, D.C.:

for William Schoonover

Associate Administrator for Hazardous Materials Safety

Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Pipeline and Hazardous Material Safety Administration, U.S. Department of Transportation, East Building PHH-30, 1200 New Jersey Avenue, Southeast, Washington, D.C. 20590.

Copies of this special permit may be obtained by accessing the Hazardous Materials Safety Homepage at http://hazmat.dot.gov/sp app/special permits/spec perm index.htm. Photo reproductions and legible reductions of this special permit are permitted. Any alteration of this special permit is prohibited.

PO: Steve H/Andrew Eckenrode